Amendments to and listing of the Claims:

Please amend claims 1-15 and add new claims 16-17, as follows. This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Currently Amended) ~~Apparatus~~An apparatus for the interstitial coagulation of tissues, ~~with at least one electrode (10) by way of which a HF coagulation current can be conducted into the tissue, wherein the electrode (10) is constructed as~~comprising a three-dimensional body that can be expanded to various states of expansion, ~~or is attached to such a body (14), so that by continuous or~~and at least one electrode adapted to conduct an HF coagulation current into said tissue, the electrode forming at least a part of said three-dimensional body such that by one of continuous and stepwise expansion of [[~~the~~]] said body ~~(10, 14) the~~said electrode ~~(10)~~ can be kept in constant electrical contact with the tissue during coagulation.

2. (Currently Amended) ~~Apparatus~~The apparatus according to Claim 1, ~~characterized in that~~wherein a control device[[~~(3)~~]] is provided for controlling the [[~~state~~]]degree of expansion of the body ~~(10, 14) in dependence~~dependent on [[~~the~~]]said coagulation current.

3. (Currently Amended) ~~Apparatus~~The apparatus according ~~to one of the preceding claims, in particular according to~~ Claim 2, ~~characterized in that the~~wherein said control device ~~(3) is disposed and constructed so as~~ is adapted to enable an adjustment of a current density of [[~~the~~]]said coagulation current between said electrode [[~~(10)~~]] and said tissue.

4. (Currently Amended) ~~Apparatus according to one of the preceding claims, in particular~~The apparatus according to Claim 3, ~~characterized in that the~~wherein said control device ~~(3) is designed so that~~permits the current density [[~~can~~]] to be adjusted independently of the [[~~state~~]]degree of expansion.

5. (Currently Amended) ~~Apparatus~~The apparatus according to ~~one of the preceding claims, characterized in that~~Claim 1, wherein measurement devices

[[~~(1)~~]] are provided for detecting the state of expansion of ~~the~~said three-dimensional body ~~(10, 14)~~.

6. (Currently Amended) ~~Apparatus~~The apparatus according to ~~one of the preceding claims, characterized in that the~~Claim 1, wherein said electrode comprises a treatment electrode[[~~(10)~~]] that is at least partially permeable to liquid and that can be brought into contact with a section of [[~~the~~]]said tissue, ~~as well as a~~ and comprising a liquid-supply device ~~(20) for liquid~~ through which an electrically conductive liquid can be delivered to [[~~the~~]]said treatment electrode [[~~(10)~~]], and a current supply device ~~(30, 31)~~adapted to deliver [[~~the~~]]said HF coagulation current to [[~~the~~]]said treatment electrode [[~~(10)~~]] in such a way that [[~~the~~]]said HF treatment current ~~can be~~is conducted to the liquid that is passing through the treatment electrode[[~~(10).~~]].

7. (Currently Amended) ~~Apparatus according to one of the preceding claims, in particular~~The apparatus according to Claim 6, ~~characterized in that the~~wherein said treatment electrode [[~~(10)~~]] comprises one of an elastically stretchable [[~~or~~]] and an unfoldable surface element ~~(11) on the inside (12) of which, i.e. the side opposite the tissue, there is disposed~~that defines an interior space [[~~(13)~~]] to which an internal pressure can be applied ~~so that the~~to expand said surface element ~~(11) can be expanded~~ by increasing the internal pressure.

8. (Currently Amended) ~~Apparatus according to one of the preceding claims, in particular~~The apparatus according to Claim 7, ~~characterized in that the~~wherein said surface element ~~(11) is shaped like~~is in the form of one of a ring [[~~or~~]] and a sphere.

9. (Currently Amended) ~~Apparatus according to one of the preceding claims, in particular according to one of the claims 6 - 8, characterized in that the~~The apparatus according to Claim 6, wherein said treatment electrode ~~(10, 10')~~ is constructed in the [[~~shape~~]] form of a balloon catheter.

10. (Currently Amended) ~~Apparatus according to one of the preceding claims, in particular according to one of the claims 7 - 9,~~

~~characterized in that the~~The apparatus according to Claims 7, wherein said interior space ~~(13) can~~is adapted to be filled with [[~~the~~]] said electrically conductive liquid.

11. (Currently Amended) ~~Apparatus according to one of the preceding claims, in particular according to one of the claims 6 - 10, characterized in that the~~The apparatus according to Claim 6, wherein said electrically conductive liquid comprises one of polyvinyl pyrrolidone (PVP), a surfactant [[~~or~~]] and a similar means of changing the viscosity of [[~~the~~]] said electrically conductive liquid.

12. (Currently Amended) ~~Apparatus according to one of the preceding claims, in particular according to one of the claims 6 - 11, characterized in that the treatment electrode (10, 10') comprises a film, a felt or a woven fabric and preferably~~The apparatus according to Claim 6, wherein said treatment electrode is made of a thermally stable material~~, in particular a tetrafluoroethylene material,~~ in the form of one of a film, a felt and a woven fabric.

13. (Currently Amended) ~~Apparatus according to one of the preceding claims, in particular according to one of the claims 7 - 12, characterized in that the interior space (13) comprises~~The apparatus according to Claim 7, wherein said interior space is enclosed by an expandable auxiliary body [[~~(14)~~]] that is hydraulically separated from [[~~the~~]] said electrically conductive liquid, [[~~the~~]] and said surface element ~~(11) preferably being~~is constructed in several layers ~~so~~such that in an inner layer [[~~(15)~~]] liquid can be conducted in ~~the surface~~a direction [[~~while~~]] towards an outer surface of the element and in an outer layer [[~~(16)~~]]liquid can be conducted in a direction perpendicular to the surface direction~~, and preferably between the inner layer (15) and the outer layer (16) a partition layer (17) with a greater resistance to flow is disposed~~.

14. (Currently Amended) ~~Apparatus~~The apparatus according to ~~one of the preceding claims, characterized by~~Claim 6, wherein a suction device ~~(22, 23)~~is provided to suck away ~~(excess)~~ liquid.

15. (Currently Amended) ~~Apparatus~~The apparatus according to ~~one of the preceding claims, characterized in that the~~Claim 1, wherein said electrode ~~(10)~~

~~is constructed so that~~is adapted to be supplied with a cutting current~~ can be applied to it~~.

16. (New) The apparatus as claimed in Claim 12, wherein said thermally stable material is comprised of tetrafluoroethylene.

17. (New) The apparatus as claimed in Claim 13, wherein a partition layer with a greater resistance to liquid flow than said inner layer is disposed between said inner layer and said outer layer.